

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Claims.

49. (Twice Amended) A method for making a non-volatile semiconductor device comprising:

forming a multilayer gate dielectric having a charge storage layer and being dielectrically equivalent to a layer of silicon dioxide having a thickness that is less than 200 angstroms;

forming a gate comprising polycrystalline silicon of a first conductivity type on said gate dielectric; and

forming source and drain regions separated by a channel region in a semiconductor substrate, said source and drain regions having a second conductivity type different from said first conductivity type.

66. (Amended) The method of claim 64, wherein:

the charge storage layer comprises silicon nitride.

67. (Amended) The method of claim 60, wherein:

the first semiconductor layer comprises a p-type gate;

and

the second semiconductor layer comprises a p-type channel disposed between n-type source/drain regions.

68. (New) The method of claim 60, wherein:

the first semiconductor layer comprises an n-type gate;

and

the second semiconductor layer comprises an n-type channel disposed between p-type source/drain regions.

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59. (New) The method of claim 60, wherein:

the multilayer gate dielectric comprises a charge storage layer selected from the group consisting of silicon nitride, silicon oxynitride, silicon-rich silicon dioxide, and a ferroelectric material.

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